| Work Orde June-05-12 9:11 | | 250 | | *852 | ************************************** | <u> </u> | | Page 1 | | | | |
|---|---------------------------|------------------------------------|-----------------------|----------------------|--|----------|--------------|-----------------|---------------|------------------|----------------|---|
| Revision ID: | D412-742-04 Replacement F | | | Accept | *N900 | 040 | 100 |)* s | Setup Star | . 171 | S1* S2* | |
| Start Date: Required Date: Reference: | 05/06/2012 19/06/2012 | Start Qty: 1.00 Req'd Qty: 1.00 | *1* *1* | | Cust Item I Customer: | D: | | · | | IN | . 7/ | |
| Approvals: Process Plan: MLJ QC: | | Date: 12/06/ | OSTooling: SPC (Y/N): | Date: Date: | | | R | Run Star Sto | · " I | R1* R2* | | |
| Sequence ID/ Work Center ID | | Operation Description | · | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp | |
| Draw Nbr | Revi | ision Nbr | | | | | | | | | | _ |
| D3391 | 1 | | | | | | | | | ¥ | | |
| 100 *4.00* | | DOCUMENT CONTRO | L | 0.00 | | | | 10 | | • | - | |

100

Memo

0.00

Document Control

If D412-742-043 is a W/O on it's own,
Photocopy bluefile and create labels per PPP D412-742-043 CHG005

June-05-12 9:11:17 AM

| Item ID: Revision ID: | D412-742-04 | 43 | | Accept | *N900 | 040 | 100 |)* s | Setup Star | *N | S1* |
|---------------------------------|--------------------------|--|---|--|--|--------|--------------|---------------|---------------|------------------|----------------|
| Item Name: | Replacement l | Float Skidtube | | | | Stop | | *NIC2* | | | |
| Start Date: Required Date: | 05/06/2012 19/06/2012 | ~ " | *1 ³ *1 ³ | | Cust Item ID: Customer: | | | | | 1.4 | |
| Reference: | | | | | | | | _ | | | |
| Approvals: | Process Pla | ın: | _ Date: | Tooling: | D | ate: | | F | Run Star | "INK1" | |
| | QC: | | Date: | SPC (Y/N): | Date: | | | | Stop | *N | R2* |
| Sequence ID/ Work Center II | | Operation Description | | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
| *110* HandFinish Hand Finishing | | 241/291. En 7/16" "T" Pi A/RSikaflex Expiry date: 2-Install we: wearplate, the ones with in A/RSikaflex Expiry date: 3-Remove " 4-Coat all ex MEK degrees | nsure tube ends line-tins. x-241/-29 M 7 1 3 0 3 arplates as per Dwg E then topped with the S tiserts on inside of tube (-241/-291 | D3391. Ensure that plastic washes washer. Seal all bolts with site hand tighten only bolts with a 40 G is dry. a LPS Procyon. Remove any exceptions a LPS Procyon. Remove any exceptions. | lignment. using ers are against taflex exept no sikaflex. | | | | | ĴŲ. | nlou (2) |

| W | ork | Order | · ID | 85250 |
|-----|-----|-------|------|-------|
| * * | | Oluvi | 11/ | 00200 |

Page 3

June-05-12 9:11:17 AM Item ID: D412-742-043 Accept *N900040100* Setup Start **Revision ID:** Item Name: Replacement Float Skidtube **Start Date:** 05/06/2012 Start Oty: 1.00 Cust Item ID: **Required Date:** 19/06/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Process Plan: Approvals: Date: Tooling: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. **Work Center ID** Description **Run Hours** Code Qty Qty Number Stamp 120 QC5- Inspect part completeness to step on W/O 0.00 Si 7/06/26 *120* QC Memo Quality Control 130 0.00 Packaging *130* Packaging 0.00 Memo Packaging Identify and pack for shipping as per PPP D412-742-043 140 QC21- Final Inspection - Work Order Release 0.00 *140* QC 0.00 Memo Quality Control

Picklist Print

June-05-12 9:11:21 AM

Work Order ID: 85250

85250

D412-742-043

Parent Item Name:

Replacement Float Skidtube

D412-742-043

Start Date: 05/06/2012

Required Date: 19/06/2012

Start Qty: 1.00

Required Qty: 1.00

Comments:

Parent Item:

IPP Rev A 05.10.13 New Issue KJ/JLM

IPP Rev 06.02.13 ECN 773 dwg @ rev.D EC IPP Rev:C 07-05-28 As per Rev F

JLM

IPP Rev:D 07-12-04 ECN 1072

DD verified by:JLM

IPP Rev:E 08-09-08 ecn 08-510 DD verified by:EC

IPP Rev:F

11.11.01 as per DSI9517 REV.B DD verified by:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------------|--------------------|----------------|-------------|--------------|---------------|----------------|----------|
| D3391-021 | | Manufactured | No | No. | 01-00 | r / 110 | Each | 0.0000 | 1 | 1 | | | |
| *D3391-02 Fwd Tube Assembly | 71* | | | 1- moral | 3391-00 | | | | ** 3 | 8236 | (1x) | ١ الا | 106/27 |
| D3391-023 | | Manufactured | No | | | 110 | Each | 0.0000 | 1 | Ī | | | |
| *D3391-02 Mid Tube Assembly | 23* | | | | | | | | ** | 38516 | 0(1x) | H | 12/06/27 |
| | | | | Location | | Loc | <u>Oty</u> | Loc Code | | | | | |
| | | | | FP | | | 1 | | _ | | _ | | |
| | | | | GA | | • | -1 | | _ | | | | |
| D3391-025 | | Manufactured | No | | | 110 | Each | 0.0000 | 1 | 1 | | | |
| *D3391-02 Aft Tube Assembly | 25* | | | | | | | | ** | 38468 | 34 (1 | 1) 4 | 1 1106/2 |
| AN3C4A | | Purchased | No | | | 110 | Each | 1,362.000 | 24 | 24 | | | |
| *AN3C4A* | • | | | | | | | | ** | <u>ld</u> | 1210 | 4/27 | |
| | | | | Location | | Loc | <u>Oty</u> | Loc Code | | | | | |
| | | | | ST350 | | | 1362 | | - | | _ | | |
| | | | | | 120187 | | 57 | |] - | | - | | |
| | | | | | 120521 120769 | | 28 38 | | - | | - | | |
| | | | | j | 121205 | | 1000 | | ; – | 424 | | | |
| | | | | 1 | 121556 | | 239 | | _ | | | | |

| NCR: Y | 'es | / No | | | | WORK ORDER NON- | CONFC | ORN | MANCE / UPDA | ATE . | | | | | | | | | |
|--|---|------------|------|-----|---|---|---------------------------|--|--------------------|---|---|---|----------|--|--|--|--|--|--|
| · | | | | | | · | | | | | QA Closed: | Date | <u> </u> | | | | | | |
| Work Orde | ır. | 1 | | | | DISPOSITION | İ | AGAINST DEPARTMENT/PROCESS | | | | | | | | | | | |
| Part No. NCR No. | | | | | | Rework Scrap Use-as-is Work Order Update | Th | ۸ nerm | Machining oforming | Crosstube Small Fab Finishing Composite | | d. Eng. Coor. re/Packaging Supplier Other | | Engineering Quality Quality | | | | | |
| NCN | v O | | | | | Work Order opudie | - | | Edige rub | | J | | | | | | | | |
| Root Cause | | Date | Step | Qty | l | ption of work order update | Initia Chief I | - 1 | Actio Descrip | | Sign & Date | Verification | | QC Inspector | | | | | |
| Doc/Data Equip/Tooling Operator Material Offset/Setup Other Process Supplier Training Unauthorized | | , | | | | | | 5 | | | | | | | | | | | |
| 0114411071202 | II | | l | | | F | AULT C | ATE | GORY | | | - | | | | | | | |
| Landiı | ng G | ear | | | | Hardware | - | | General | | | _ | | · · · · · · · · · · · · · · · · · · · | | | | | |
| | Bending Passes Below Min Centre Not Concentric to O/S Cracks Crushed/Crimp at Bending Inspection Strip in Tube Other Positioned Wrong | | | | | Breaking Missing Size/Length Spinning Threading Wrong Drill Holes | Cor Cut Doo Fini | Burrs Contamination Cut Too Short Documentation/Data Finish Inspection Incomplete Inspection Unqualified | | | Maintenan Mislabeled Off-Set Orientation Out of Calib Out of Sequ Outside Dim | Misread ration ence | S | Set-up Supplier Femperature/Cure Weld Wrong Stock Pulled Other | | | | | |
| | Н | Ripples of | _ | | | Misaligned | | • | ions Incomplete/Un | clear | Over/Under | L | | | | | | | |

Jigs/Fixtures/Tooling

Kit Incorrect

Kit Missing

DQA:

Part Lost

Part Moved

Raw Material

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Ovalized

Too Many

Over/Undersized

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev F

| June-05-12 9:11:21 AM | | | | | | | | | |
|----------------------------------|-----------|------------------|--------------------------|-----------|----------------------------|----------|--|----------|--|
| Work Order ID: 85250 | | *8 | 5250* | | | | · · | • | |
| Parent Item: D412-742-043 | | | 412-742-0 | ገ// 2* | | | | | |
| Parent Item Name: Replacemen | • 4 | 14 17 - 1 47 - 1 | | | art Date: 0 tart Qty: 1 | | Required Date: 19/06/2012 Required Qty: 1.00 | | |
| AN3C6A | Purchased | No | | 110 | Each | 451.0000 | 10 | 10 | |
| *AN3C6A* | | | | | | | ** | H | 1106/27 |
| | | | Location | <u>L</u> | oc Qty | Loc Code | | | |
| | • | | FP001 | | 1 | | | | |
| | | | 111982 | | 1 | | | | |
| | | | ST351 | • | 450 | | | | _ |
| | | | 111982 | | 2 | | | | - |
| | | | 116419 | | 23 | | | | _ |
| | * | | 116549 | | 2 | | | | |
| | | | . 116704 | | 12 | | | | _ |
| | | | 117619 | | 10 | | • | | |
| | | | 117688 | | 1 | | | - | _ |
| | | | 117872 | | 5 | | | · . | |
| | | | 118422 119449 | | 13 | | | | _ |
| | | | 120423 | | 21 3 | | | | <u>.</u> |
| · | | | 120693 | | 158 | | | <u>'</u> | throate. |
| | | • | 121682 | | 200 | | | <u> </u> | - All All All All All All All All All Al |
| AN3C7A | Purchased | No | | 110 | Each | 140.0000 | 4 | 4 | _ |
| * | | | | | Buon | 140.0000 | ele ele | • | 1 1 1 2 |
| *AN3C7A* | | | | | | | ** | W | 1 1106/27 |
| | | | Location | <u>La</u> | c Qty | Loc Code | | | |
| | | | ST351 | | 140 | | | | _ |
| | | | 113149 | | 14 | | | | |
| | | | 116169 | | 1 | | | | _ |
| | | | 117313 | | 10 | | | | _ |
| • | | | 117619 | | 12 | | | | _ |
| | | | 117688 | | 6 | | | | _ . |
| | | | 119749 120731 | | . I | | | | _ · |
| | | | 120731 1 <u>21185</u> | | 8 50 | | | y el | _ |
| | • | | 121541 | | 50 38 | | | <u> </u> | - |
| | | | | | 30 | | | | _ |

Shop Packet Print

Page 2

Picklist Print

June-05-12 9:11:21 AM

| | | | | | | | | | | DQA: | Date: | |
|---------------|---------------------------|-------------|----------|--------|----------------------------|----------|------------|-------------------|-------------|--------------|---------------|---------------------------------------|
| NCR: Y | es / No | | | | WORK ORDER NON-O | CONI | FORM | MANCE / UPD | DATE | | | - |
| | | | | | | | QA Closed: | Date: | | | | |
| Manle Onda | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT, | PROCESS | |
| Work Orde | er: | | | | Rework | 1 | | Skid-tube | Crosstube | l Pro | d. Eng. Coor. | Engineering |
| Part N | lo | | | | Scrap | 1 | | Machining | Small Fab | 1 | e/Packaging | Quality |
| 1 01 01 | | | | | Use-as-is | 11 | | noforming | Finishing | , | Supplier | 1 1 |
| NCR N | lo. | | | | Work Order Update | 11 | | Large Fab | Composite | 1 | Other | 1 . [7] |
| | | | | | <u> </u> | <u> </u> | | | <u></u> | • | | |
| Root | | | | Descri | ption of work order update | 1 | tial | Acti | | Sign & | | |
| Cause | Date | Step | Qty | | or Non-conformance | Chie | f Eng | Descri | ption | Date | Verification | QC Inspector |
| Doc/Data | | | | | | | | | | <u>.</u> | | |
| Equip/Tooling | | | | | | | | | | | | |
| Operator | | | | | • | | | | | | | |
| Material | | | | | | | | - - | | | | |
| Offset/Setup | | | | | | | | | | | | |
| Other | | | | | | | | | | | | |
| Process | | | | | | | | | | | | |
| Supplier | | | | | | | | | _ | | | |
| Training | _ | | | | | | | | • | | | |
| Unauthorized | <u> </u> | <u> </u> | | | <u> </u> | ΔULT | CATE | GORY | | | <u> </u> | <u> </u> |
| Landir | ng Gear | | | | Hardware | | - | General | | | | · · · · · · · · · · · · · · · · · · · |
| | Bending | Passes Be | elow Mir | | Breaking | Пв | urrs | | | Maintenan | ce | Set-up |
| | | lot Conce | | | Missing | Пс | ontam | ination | | Mislabeled | | Supplier |
| | Cracks | | | | Size/Length | \Box c | ut Too | Short | | Off-Set | | Temperature/Cure |
| | Crushed | /Crimp at | Bending | , [| Spinning | | ocume | entation/Data | | Orientation | Misread | Weld |
| | Inspection | on Strip ir | n Tube | | Threading | F | inish | | | Out of Calib | ration | Wrong Stock Pulled |
| : | Other | | | | Wrong | ∐ lr | nspecti | ion Incomplete | | Out of Sequ | ence | · |
| | Position | ed Wrong | 3 | | Drill Holes | ∐ lr | nspecti | ion Unqualified | | Outside Dim | ensions | Other |
| | Ripples on Inner Bend | | | | Misaligned | ∐lr | nstruct | ions Incomplete/U | Inclear | Over/Under | tolerance | |
| | Torque Waves in Extrusion | | | | Ovalized | it | igs/Fixt | tures/Tooling | | Part Lost | | |

Kit Incorrect

Kit Missing

Part Moved

Raw Material

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev F

Turning Sequence

Wave/Twist in Tube

Over/Undersized

Too Many

June-05-12 9:11:21 AM

| Work Order ID: 85250 | | *8! | 5250 |)* | | · · | | | | | |
|-------------------------------------|--------------|----------------|----------|-----------|-----------|-----------|----------|---------------------------|------------|---|--------|
| Parent Item: D412-742-043 | | *D412-742-043* | | | | | | | | | |
| Parent Item Name: Replacement Float | t Skidtube | 1) | 41/. | -/4/-()4 | F-C) | | | Start Date: Start Qty: | 05/06/2012 | Required Date: 19/06 Required Qty: 1.00 | 5/2012 |
| AN960C10L NAS1149C0332 | Purchased | No | | | 110 | Each | 0.0000 | 38 | 38 | | |
| *AN960C10I * > | 5 | | | • | | 11122 | 20.63 | ** | (38*) | M 11/06/27 | |
| D4095-041 | Manufactured | No | | · · · · · | 110 | Each | 0.0000 | 1 | 1 | | |
| *D4095-041* Wearplate Assembly | | | | | | 13838 | 509 | ** | (x1) M | 12/06/22 | |
| D4095-043 | Manufactured | No | | | 110 | Each | 1.0000 | 1 | 1 | | |
| *D4095-043* Wearplate Assembly | | | | | | 138347 | t e4 | ** | (x1) H | 1 110417 | |
| | | | Location | <u>n</u> | <u>Lc</u> | oc Qty | Loc Code | | | | |
| | | | FP001 | | | 1 | | | | _ | |
| D4095-045 | Manufactured | No | | 81624 | 110 | l Each | 15.0000 | 1 | 1 | _ | |
| *D4095-045* Wearplate Assembly | | | | | | | | ** | H | 1106/27 | |
| · · · · · | | | Location | <u>1</u> | Lo | oc Oty | Loc Code | | | | |
| | | | FP | 01/05 | | 1 | | | | _ | |
| | | | FP001 | 81625 | | 1 | | | | _ | |
| | | | 11001 | 77737 | | 14 1 | | | | | |
| • | | | | 84081 | | 13 | | | УС | - - | |















